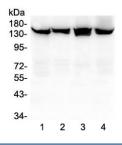


# SMC3 Antibody [clone 4C12] (RQ4493)

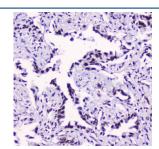
Catalog No.	Formulation	Size
RQ4493	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

# **Bulk quote request**

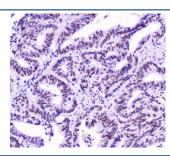
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	4C12
Purity	Protein G affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q9UQE7
Localization	Nucleus
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This SMC3 antibody is available for research use only.



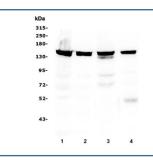
Western blot testing of human 1) HeLa, 2) A549, 3) MCF7 and 4) MDA-MB-453 lysate with SMC3 antibody at 0.5ug/ml. Predicted molecular weight ~141 kDa.



IHC testing of FFPE human lung cancer with SMC3 antibody at 2ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE human intestinal cancer with SMC3 antibody at 2ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



Western blot testing of 1) human HeLa, 2) human HEK293, 3) rat thymus and 4) mouse thymus lysate with SMC3 antibody at 0.5ug/ml. Predicted molecular weight ~141 kDa.

### **Description**

Structural maintenance of chromosomes 3, also known as SMC3, is a human gene. This gene belongs to the SMC3 subfamily of SMC proteins. The encoded protein occurs in certain cell types as either an intracellular, nuclear protein or a secreted protein. The nuclear form, known as structural maintenance of chromosomes 3, is a component of the multimeric cohesin complex that holds together sister chromatids during mitosis, enabling proper chromosome segregation. Post-translational modification of the encoded protein by the addition of chondroitin sulfate chains gives rise to the secreted proteoglycan bamacan, an abundant basement membrane protein.

## **Application Notes**

Optimal dilution of the SMC3 antibody should be determined by the researcher.

#### **Immunogen**

Amino acids ELLESADKFYGVKFRNKVSHIDVITAEMAKDFVEDDTTH were used as the immunogen for the SMC3 antibody.

#### **Storage**

After reconstitution, the SMC3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.